

Title (en)  
TORQUE DETECTION DEVICE AND ELECTRIC POWER STEERING DEVICE

Title (de)  
DREHMOMENTERKENNUNGSVORRICHTUNG UND SERVOLENKVORRICHTUNG

Title (fr)  
DISPOSITIF DE DÉTECTION DE COUPLE ET DISPOSITIF DE DIRECTION ASSISTÉE

Publication  
**EP 2677292 B1 20150923 (EN)**

Application  
**EP 12747158 A 20120130**

Priority  
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• JP 2011066927 A 20110325  
• JP 2012051987 W 20120130

Abstract (en)  
[origin: US2013282239A1] A torque detecting device and an electric power steering system are provided. A torque sensor includes a first rotor that is fixed to an input shaft and that has a predetermined shaft angle multiplier, and a second rotor that is fixed to an output shaft and that has a shaft angle multiplier different from that of the first rotor. In first to fourth output coils arranged on a stator that is arranged around outer peripheries of the first and second rotors, electric signals having different phases are generated on the basis of a variation of a gap between the stator and the first and second rotors. A twist angle of a torsion bar is calculated on the basis of the electric signals, and a torque that acts between the input shaft and the output shaft is calculated on the basis of the twist angle.

IPC 8 full level  
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CPC (source: EP US)  
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